Case 2784

Procellaria gigantea Gmelin, [1789] (currently *Macronectes giganteus*; Aves, Procellariiformes): proposed conservation of usage of the specific name by designation of a neotype

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Abstract. The purpose of this application is to conserve the current universal understanding and usage of the specific names of *Macronectes giganteus* (Gmelin, [1789]) and *M. halli* Mathews, 1912 for the southern, antarctic and the more northern, subantarctic species of giant petrel respectively (family PROCELLARIIDAE). The name *giganteus* (type species of the genus *Macronectes* Richmond, 1905) was based on a description of the second species. It is proposed that a neotype for *giganteus* be designated.

Résumé. L'objet de cette requête est de conserver l'usage couramment accepté des noms spécifiques de *Macronectes giganteus* (Gmelin, [1789]) et *M. halli* Mathews, 1912 pour, respectivement, le pétrel géant antarctique et le pétrel géant subantarctique (famille des PROCELLARIIDAE). Le nom de *giganteus* (espèce-type du genre *Macronectes* Richmond, 1905) est fondé en fait sur une description de la seconde de ces deux espèces. Il est proposé de désigner un néotype pour *giganteus*.

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1. The genus *Macronectes* Richmond, 1905 was thought, until relatively recently, to include only one species, *Procellaria gigantea* Gmelin, [1789] (p. 563), the giant petrel of southern oceans. Bourne & Warham (1966) showed that two sibling species were involved, which they called *M. giganteus* and *M. halli* Mathews, 1912 (p. 187; described as *M. giganteus halli*). One of us (Voisin, 1968) later confirmed these findings. Bourne & Warham (1966, p. 64) designated specimen no. 91.6.16.6 in the collections (now at Tring) of the Natural History Museum, London as 'the Type' of *M. halli*. The specimen, taken from the Kerguelen Islands in 1840 by the Antarctic Expedition under Sir James Clarke Ross, is one of those studied by Mathews and is to be regarded as the lectotype.

2. Various morphological and biological characteristics of the two species have been studied by a number of authors (see, for example, Bourne & Warham, 1966; Voisin, 1968, 1976, 1982, 1988; Johnstone, 1971, 1974; Voisin & Bester, 1981; Hunter, 1983, 1987). The two species have very similar measurements in the localities where they co-exist, which does not permit their separation. Their plumages become progressively lighter with age and show significant differences in old birds only. The southern species, *giganteus*, is polymorphic, with a grey, white-headed dark form and a white form. The birds of the more northerly species, *halli*, are darker, browner and have lighter underparts, and have no white form. The most obvious morphological difference is the

colour of the bill, which is green or green-tipped in *giganteus* and reddish-brown in *halli*. Unfortunately, this character, which is apparent even in fledglings, fades rapidly after death and disappears completely in specimens which have been kept in fluids or in poor conditions, which was often the case in the early days of ornithology.

3. The nominal species *Procellaria gigantea* was proposed by Gmelin ([1789]), who summarised the description given by Latham (1785, pp. 396–397, pl. 100) and latinized the latter's vernacular 'giant petrel'. Gmelin was the first to publish the name, which had been used in manuscripts for some time; he may never have seen a specimen. The birds described by Latham are supposed to have been taken off Staten Island (Isla de los Estados, Argentina) during Cook's first voyage, 1768–1771 (see Mathews, 1912, pp. 181, 186; Bourne & Warham, 1966). They have disappeared from the Natural History Museum, London, if they ever reached it. Mathews (1912, p. 2) noted 'whatever became of the birds cannot now be definitely ascertained, but apparently none of the specimens met with on the first voyage came into the possession of the British Museum'. There are today only illustrations made by S. Parkinson, the artist on Cook's first voyage, of two specimens of these giant petrels, nos. 17 (an unsigned pencil sketch) and 18 (an unsigned painting) in the Museum in London (Banks collection), but neither can be determined to species (Voisin, 1981). Mathews (1912, pp. 181–182) reproduced the unpublished descriptions by Solander of these two illustrations.

4. Latham's (1785) description does not correspond with these illustrations, nor with Solander's descriptions which Latham seems to have ignored. Latham's and Gmelin's descriptions, and Latham's accompanying figure, were based on mature birds and clearly relate to the species now called *M. halli*. In his description of the birds Latham noted that 'Captain Cook met with them in vast numbers in Christmas Harbour, Kerguelen's Land (Cook's Last Voy., i, p. 87; ii, p. 205)', where *halli* is very common and *giganteus* extremely rare (see Thomas, 1983, p. 137; Weimerskirch, Zotier & Jouventin, 1989; Voisin, pers. obs.). Mathews (1912, pp. 183, 187) considered that Latham's description did not apply to the Kerguelen breeding bird but it now seems highly probable that Latham based his description on observations, pictures and even specimens of *halli* retrieved from the Kerguelen Islands on Cook's last voyage, 1776–1780 (see Godman, 1909, p. 262). Mathews (pp. 2, 3) noted that the specimens and drawings collected on this last voyage passed into the Banks collection where they were studied by Latham. A painting of a giant petrel (no. 39 in the Banks collection) made on the Kerguelen Islands by W. Ellis, one of the artists on Cook's third voyage, is unfortunately unidentifiable to species (see Mathews, 1912, pp. 2, 183; Lysaght, 1959, p. 328).

5. Recognition that the name *gigantea* Gmelin, [1789], based on Latham's (1785) description, relates to the northern giant petrel means that this is the valid name for the species currently called *Macronectes halli* Mathews, 1912, and the southern species, currently called *gigantea*, requires a new name. *Procellaria ossifraga* Forster, 1844 (p. 343) is a junior synonym of Gmelin's name but there is no type material and it is not possible to determine its specific identity from the published description; the name has not been used since its original publication. The transfer of the name *gigantea* to the species currently called *halli* is very undesirable and would cause great confusion. Since 1966 all authors have used the names *gigantea* and *halli* as Bourne & Warham defined them, in both taxonomic and ecological works (see, for example, Marchant & Higgins, 1990, pp. 356-376; Sibley & Monroe, 1990, pp. 320, 321; Warham, 1990; a list

of a further 50 works demonstrating usage of the names is held by the Commission Secretariat). *Procellaria gigantea* is the type species by monotypy of the genus *Macronectes* Richmond, 1905 (p. 76; a replacement name for the invalid *Ossifraga* Hombron & Jacquinot, 1844 (p. 357), a junior homonym of the raptor name *Ossifraga* Wood, 1835).

6. We propose that nomenclatural stability should be maintained by designating a neotype for *Macronectes giganteus* in its universally accepted sense following Bourne & Warham (1966). We therefore designate specimen no. 1911 340 in the Catalogue Général of the Laboratoire de Zoologie: Mammifères et Oiseaux, Muséum National d'Histoire Naturelle, Paris as the neotype. It is a specimen collected at Admiralty Bay, King George Island, South Shetlands, not far from a breeding colony (Gain, 1913). No subspecies of *M. giganteus* has been described from this locality and *M. halli* does not nest there. The specimen is an adult male with the dark underparts and white head characteristic of *M. giganteus.* It bears two white labels noting (1) 'Mission Antarctique Française 1908–1910, no. 914, voyag. date 30.12.1909' and (2) morphological details, and a red label noting '*Procellaria gigantea* Gmelin, [1789] neotype, C.G. 1911 no. 340'.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to designate specimen no. 1911 340 in the Muséum National d'Histoire Naturelle, Paris, for which the data are given in para. 6 above, as the neotype for the nominal species *Procellaria gigantea* Gmelin, [1789];

(2) to place on the Official List of Generic Names in Zoology the name *Macronectes* Richmond, 1905 (gender: masculine), type species by monotypy *Procellaria gigantea* Gmelin, [1789];

(3) to place on the Official List of Specific Names in Zoology the following names:

  (a) *gigantea* Gmelin, [1789], as published in the binomen *Procellaria gigantea* (specific name of the type species of *Macronectes* Richmond, 1905) and as defined by the neotype designated in (1) above;

  (b) *halli* Mathews, 1912, as published in the trinomen *Macronectes giganteus halli* and as defined by the lectotype designated by Bourne & Warham (1966).

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